MAKING A DIFFERENCE

For Students with Autism Spectrum Disorders in Ontario Schools

From Evidence to Action

Report of the Ministers' Autism Spectrum Disorders Reference Group to:
Minister of Education
Minister of Children and Youth Services

February 2007

MINISTERS' AUTISM SPECTRUM DISORDERS REFERENCE GROUP

January 2007

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Minister of Children and Youth Services
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Dear Ministers:

In June of 2006, your government announced its intention to create a reference group to advise on the most effective ways to meet the needs of students with Autism Spectrum Disorders in Ontario schools.

Fourteen individuals were selected in September 2006 to serve on the Ministers' Autism Spectrum Disorders Reference Group, which carried out its work through a series of meetings from September 2006 through January 2007.

During this time, members of the Reference Group conducted an extensive review, discussion and evaluation of evidence-based practices which have been found most effective in meeting the wide range of needs of students with ASD. The Reference Group respectfully acknowledges the work of earlier advisory groups, listed in this report, whose findings and recommendations were considered an important foundation for discussion and review.

The Reference Group also acknowledges the considerable investment government has made, and continues to make, to build and improve the continuum of services for Ontario children and youth with ASD.

The Ministers' Autism Spectrum Disorders Reference Group is pleased to present *Making a Difference for Students with Autism Spectrum Disorders in Ontario Schools: From Evidence to Action*, which provides a concise overview of the discussions held by the Reference Group, and its final recommendations regarding province-wide implementation of practices to support students with Autism Spectrum Disorders.

We are confident that the recommendations contained within this document will enhance and complement the initiatives already undertaken across the province, and provide the critical supports needed to fulfill this government's commitment to success for every student.

Respectfully,

Ministers' Autism Spectrum Disorders Reference Group

Lynn Ziraldo

Lynn Ziraldo, Chair

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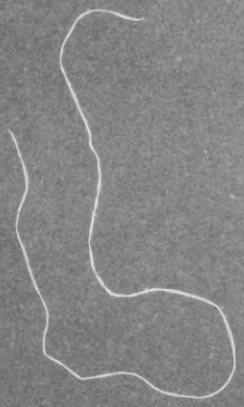
PROFILES: Like all children and young adults, students with ASD are unique individuals, each with his or her own strengths, challenges and needs. The fictional profiles in this document are intended to deepen the knowledge of the reader by illustrating the lived experiences of these students and their families.

Steven p6 Fred p15 Rui p32 Julia p33 Peter p41 Jamal p44 Darnell p51

INTRODUCTION AND BACKGROUND



In June of 2006, the government announced its intention to create a Ministers' Autism Spectrum Disorders Reference Group, which would provide advice to the Minister of Education and the Minister of Children and Youth Services on effective, evidence-based educational practices to meet the wide range of needs of students with Autism Spectrum Disorders.

THE MINISTERS' AUTISM SPECTRUM DISORDERS REFERENCE GROUP

Members of the Reference Group were selected for their expertise and professional and personal experience with children, youth and young adults with ASD. Members included practitioners and researchers with extensive experience working with students with ASD, parent representatives, and representation from the francophone community.

The Ministers' Autism Spectrum Disorders Reference Group was established in September 2006, and worked from September 2006 through January 2007, with a mandate to produce a report and recommendations to the Minister of Education and the Minister of Children and Youth Services in January 2007.

AUTISM SPECTRUM DISORDERS (ASD)

There are more than 7,000 students with Autism Spectrum Disorders (ASD) in Ontario schools. In Canada, the incidence of ASD is roughly 0.6 percent, or one in 165 children (Fombonne, Zakarian, Bennett, Meng, and McLean-Haywood, 2006).

Autism Spectrum Disorders (ASD) is a term that was coined by both Wing and Allen to describe a subset of the Pervasive Developmental Disorders (PDD) currently outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). These disorders share three common areas of concern:

- Qualitative impairments in social skills
- Qualitative impairments in verbal and nonverbal communication
- Restricted and repetitive interests or behaviours.

When using the term ASD, most professionals are referring to the subset of PDD that includes Autistic Disorder (usually referred to as Autism), PDD-NOS (not otherwise specified), and Asperger's Disorder.

The term 'spectrum' is also used to refer to a continuum of developmental severity. Autistic Disorder, considered to be at the more severe end of the spectrum, is accompanied by significant cognitive impairments in about 75 to 80 percent of cases. On the other hand, most individuals with Asperger's Disorder tend to have average to above average intellectual functioning (Perry & Condillac, 2003).

In addition, some students with ASD may be diagnosed with one or more other conditions, which add to the complexity of addressing the needs of these students.

SCOPE OF REVIEW

Under the leadership of Chair Lynn Ziraldo, the Reference Group reviewed and evaluated a broad range of evidence-based practices which have proven effective in meeting the needs of students with Autism Spectrum Disorders.

This evaluation included examination of a variety of models of service delivery. A comprehensive discussion was conducted regarding present practices in Ontario, desired evidence-based educational practices, and both the challenges and enablers which have an impact on successful implementation.

The Reference Group also examined supports for students with ASD including the relationship among treatment and educational practice, intensive behavioural programming, parameters regarding what may take place in Ontario schools at the present time, and effective transitions for students.

Additional discussions focused on a variety of key topics such as the importance of parental involvement in all phases of programming, the expertise of professionals in the creation of the Individual Education Plan (IEP), and the need for professional development and training of staff working with students with ASD.

The Reference Group recognized and built on earlier research, including consideration of the findings and recommendations of expert groups which have consulted to the ministries of Education and Children and Youth Services including:

- *Summary of Advice from the Provincial Advisory Group for the Autism Spectrum Disorders Strategy April – June 2006* (Ministry of Children and Youth Services, 2006)
- *Special Education Transformation: The Report of the Co-Chairs with the Recommendations of the Working Table on Special Education* (Ministry of Education, 2006)
- *Education for All: The Report of the Expert Panel in Literacy and Numeracy Instruction for Students with Special Education Needs, Kindergarten to Grade 6* (Ministry of Education, 2005)
- *A Shared Responsibility: Ontario's Policy Framework for Child and Youth Mental Health* (Ministry of Children and Youth Services, 2006)
- *Safe Schools Policy and Practice: An Agenda for Action, Safe Schools Action Team* (Ministry of Education, 2006)

The work of the Reference Group complements this former work with additional research-based effective practice, focusing on a range of services provided for school-aged children across the Autism spectrum of disorders.

PROCESS AND RECOMMENDATIONS

The Reference Group initially defined a vision statement, core values, and guiding principles which would inform the balance of its work. In addition, the Group developed a glossary of terms which would also help define its final report.

In order to provide a framework for its observations and recommendations, the Reference Group developed and refined a three-point agenda for action, presented within this report along with a summary of relevant discussion and recommendations. A recommended timeline for these recommendations, including immediate, short-term and long-term priorities, has been provided with concluding remarks.

Steven

Steven is a 6 year old boy with ASD. He has had 3 years of IBI from the Regional Intensive Behavioural Intervention (IBI) program and is making significant progress. Steven did not attend kindergarten in order to maximize his IBI program. His team feels he will be able to manage in the Grade One class of his local school with some support. Steven is very prepared academically but needs more exposure to small group work and help with social integration.

VISION AND GUIDING PRINCIPLES

The following vision, core values and guiding principles were defined and adopted by the Ministers' Autism Spectrum Disorders Reference Group to focus and inform discussion, and provide a framework for the development of its final recommendations. The vision developed by the Reference Group aligns with, and supports, the vision of both the Ministry of Education and the Ministry of Children and Youth Services.

VISION

Children and youth with Autism Spectrum Disorders in Ontario will achieve their potential with respect to learning through effective evidence-based educational practices and responsive, child and youth centred programs and services to enhance lifelong learning within a quality of life framework.

CORE VALUES

Effective, evidence-based educational practices for students with Autism Spectrum Disorders (ASD) will be:

CHILD AND YOUTH-CENTRED
Provides holistic enhancement of students' learning potential while responding to individual, social, emotional and physical needs, across services and ministries.

RESPECTFUL
Reflects fair, dignified and culturally and linguistically sensitive practices.

RESPONSIVE
Focuses on the needs of the whole child and family, embracing evidence-based practices and encouraging research and innovation.

ACCESSIBLE
Executes equitable, coordinated, integrated, timely, transparent and responsive policies, programs and services.

ACCOUNTABLE
Emphasizes positive performance outcomes.

Ministry of Education

Ontario students will receive the best possible education in the world, measured by high levels of achievement and engagement for all students. Successful learning outcomes will give all students the skills, knowledge and opportunities to attain their potential, to pursue lifelong learning, and to contribute to a prosperous, cohesive society.

Ministry of Children and Youth Services

The Ontario government envisions an Ontario where all children and youth have the best opportunity to succeed and reach their full potential.

GUIDING PRINCIPLES

The recommendations of the Autism Reference Group are based on the following principles that the group believe to be the foundation of effective education for students with ASD:

STUDENTS

- All students can succeed.
- Each student has his or her own unique pattern of learning.
- Everyone involved in the education of students with ASD has high expectations for learning.
- Students with ASD have seamless educational transitions.
- Students have access to the supports, services, programs and range of placements they need to achieve their potential.

EDUCATORS AND SCHOOL BOARDS

- Successful educational practices are evidence-based and founded on research.
- Universal design and differentiated instruction provide teachers with effective methods to address the various learning needs of students.
- Classroom teachers have the primary responsibility for a student's literacy and numeracy development. Programming for students with Autism Spectrum Disorders will be designed and implemented in collaboration with the classroom teacher and other individuals involved with the student.
- School systems and classroom teachers need to work collaboratively with the broader professional community and families, and have access to coordinated community resources and supports, to create a learning environment that supports students with Autism Spectrum Disorders.
- Educators and related professionals must have the competencies and current knowledge, gained through high quality professional development including mentoring, to understand and address the learning requirements of students with ASD.
- Educators use instructional strategies that promote student capacity for independent learning and self-determination, including self-advocacy.
- Each school fosters a sense of belonging for all students with ASD.

PROGRAM DELIVERY

- Fairness is not sameness.
- Accessible, accountable, connected educational programs and services support coherent and sustainable models of delivery.
- Special education services are measurable, responsive to change and enriched by proven innovations.
- A coordinated approach among service providers enables student achievement.
- Programs, services and supports for students with autism spectrum disorders address the range of core components of effective educational practices, addressing individual strengths as well as needs (such as communication, social interaction, behaviour).

FAMILY AND COMMUNITY INVOLVEMENT

- Parents and students engage actively and collaboratively with educators and community agencies in decisions related to providing effective programs and services for students with ASD.

FOUNDATIONS
CURRENT INITIATIVES, PROGRAMS AND PRACTICES

In developing its recommendations, the Ministers' Autism Spectrum Disorders Reference Group reviewed and acknowledged the work of the provincial government in enhancing programs and services for children with ASD, and assessed the results of a survey of current practices at district school boards across Ontario. Following is a brief summary of key government initiatives, and results of the provincial survey.

THE PROVINCIAL PERSPECTIVE

The government of Ontario, through the ministries of Education, Children and Youth Services, and Training, Colleges and Universities, has provided an expanded continuum of services to help Ontario families, educators and other service providers meet the challenges of ASD.

Initiatives to Support Education Programs and Practices

In 2003, the Ministry of Education hosted a province-wide conference, 'Teaching Students With Autism: Enhancing the Capacity of Ontario's Schools' to enhance the capacity of school board staff to lead, plan and implement special education programs and services. This conference was followed by regional forums in 2004 for school administrators, teachers and teachers' assistants to further explore programming and effective strategies for students with ASD.

In 2004, the ministries of Education and Children and Youth Services partnered with school boards and designated community agencies to develop the School Support Program – Autism Spectrum Disorder (SSP-ASD). Through this program, school boards were connected with 185 ASD consultants to help school staff – teachers, principals and others who interact with children – build their capacity to meet the needs of students with ASD.

In the Fall of 2005, the Ministry of Education retained Geneva Centre for Autism to conduct a research study about the specific placements, programs, services and support options offered by school boards to students with ASD.

In December of that year, the Ministry of Education distributed *Planning Entry to School: A Resource Guide* to assist school boards with the planning entry to school process for all children, including those with special needs.

The Ministry of Education has also provided funding to:

- Geneva Centre for Autism to provide training in 2007 and 2008 to teachers' assistants who work, or may work, with students with ASD
- The Council of Ontario Directors of Education (CODE) to support school board projects that improve instructional practices, enhance system capacity and support better achievement for students with special education needs
- The Ontario Psychological Association, to work with school boards to reduce current wait times for students who require assessments, and to enhance the capacity of teachers to provide effective programs for students with special education needs based on assessment information.

In addition, a new document titled *Resource Guide on Effective Educational Practices for Students with Autism Spectrum Disorders (ASD)* is being developed to provide information that will guide educators in the planning and implementation of effective educational programs for students with ASD in Ontario schools. It is expected that the resource guide will be distributed to school boards in 2007.

School boards' special education plans are being transformed so that they focus on target setting and improvement planning related to student achievement and program effectiveness. In addition, boards are being encouraged to streamline the Identification, Placement and Review Committee (IPRC) process to reduce barriers or delays in accessing special education programs and services, and to reinforce the connection between a student's Individual Education Plan (IEP), the Ontario curriculum and the provincial report card.

Data Gathering: District School Boards

In November 2006, a survey was distributed to school boards and school authorities across Ontario to gather information on current programs and practices for consideration by the Ministers' ASD Reference Group.

All responses provided descriptions of the educational programs or practices that are considered to be very effective for students with ASD, many in considerable detail.

Various models of delivery for students with ASD, from inclusion in regular classes to a variety of full-time special education classes, were reported. Several responses described programs or classes available specifically for students with ASD.

Some survey responses provided information about the staff supports that are available through both school boards and outside agency staff. Practices such as the use of a multi-disciplinary team approach, and collaborative partnerships with outside agencies, were highlighted by several boards as examples of best practices.

Several boards reported on a variety of staff in-service sessions and workshops that are provided on ASD. In some cases, in-service is provided through partnerships with staff from the School Support Program. In-service opportunities include board-wide, smaller group (such as school staff), and targeted audiences (such as teachers' assistants and bus drivers).

In-service sessions in many cases included methods for managing behaviour, the use of positive behaviour supports, for example, and the development of Behaviour Intervention Plans. Training on the implementation of specific programs such as Picture Exchange Communication System (PECS), Circles, and assistive technology such as Boardmaker and Writing with Symbols were also indicated by school boards.

Each of the school boards and school authorities provided information about the processes or tools used to determine the effectiveness of their practices or programs. Many responses indicated the use of informal methods, such as recording anecdotal notes, staff discussions or team meetings, and teacher observation to monitor individual student progress. Some school boards also described structured methods, such as systematic surveys, and data collection and analysis, to track and monitor the effectiveness of programs and practices on a board-wide basis. In addition, some program reviews involved external input from parents, Special Education Advisory Committee (SEAC) and outside agencies.

Fred

Fred is a 7 year old boy with autism. He has been in an IBI program for many years, where his progress has been slow but consistent. Fred lives in a small rural community, and at times needs to travel long distances to access services. Fred continues to have a private home-based program. Fred has minimal verbal skills and requires significant support. He regularly engages in self-injury, most notably, biting his hand. His doctor is very concerned about his hand as he is inflicting significant damage which may soon require surgery.

EXAMPLES OF SUCCESSFUL PRACTICES IN ONTARIO SCHOOL BOARDS

YORK REGION DISTRICT SCHOOL BOARD

York Region DSB established partnerships with the York Region Catholic DSB, several community agencies, the ministries of Education and Children and Youth Services, to develop knowledge, skills and supports in regard to students with ASD with dual diagnoses and complex needs. Examples of initiatives developed through the partnerships include a Section 23 class and a mobile crisis unit that provides social work for families, nursing care for administration of medication, and psychiatric consultation if required.

RAINBOW DISTRICT SCHOOL BOARD

Rainbow DSB has developed a five year training plan to enhance staff capacity through the use of ASD training modules that have been designed for all educational assistants and targeted teaching and administrative staff. This board has also produced ASD information videos that are used for a variety of audiences such as school councils, parents, trustees, Special Education Advisory Committee (SEAC), transportation, school staff and support staff.

CONSEIL DES ÉCOLES PUBLIQUES DE L'EST DE L'ONTARIO

A partnership between the CÉPEO and the SSP-ASD team at Children's Hospital of Eastern Ontario (CHEO) has facilitated the creation of a centre of excellence for ASD in one school where there are 3 congregated ASD classes. This model provides for bi-monthly in-service, and ongoing access to follow-up consultations for the school team.

KENORA CATHOLIC DISTRICT SCHOOL BOARD

Kenora Catholic DSB collaborates with a broad range of professional resource people who help design and support the programming needs of the student. In addition, the Kenora Catholic DSB has made 'extensive effort' to support the training and professional development of teachers and their 'invaluable Educational Assistants'.

TRILLIUM LAKELANDS DISTRICT SCHOOL BOARD

Trillium Lakelands DSB offers 'supportive and safe places' for secondary students with Asperger's Disorder in which academic support is offered as well as opportunities to socialize before and after the school day, and during the lunch hour.

ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD

St. Clair Catholic DSB works in partnership with Chatham Kent Children's Services to offer a Section 23 class, the Autism Transitional Classroom, to serve extremely high needs students who have a dual diagnosis. This program, supervised by a clinical psychologist, focuses initially on treatment and incorporates strategies to translate treatment goals into educational strategies. Professional development and training are provided to staff from the students' home school, as well as staff in the program. The goal for all students is entry into their home school.

DUFFERIN-PEEL DISTRICT SCHOOL BOARD

Partnerships with community agencies and families include Central West Transition Network, a forum for Preschool Autism Services (PAS) and the school board to create and share practices for children transitioning from an Intensive Behavioural Intervention Program (IBI) to school. There are also annual parent support sessions to assist in developing the communication skills of students who are non-verbal or minimally verbal, facilitated by speech-language pathologists, teachers and Erinoak SSP staff.

CONSEIL SCOLAIRE DE DISTRICT CATHOLIQUE DU CENTRE-SUD

Three pilot projects initiated in January 2007 will provide access to an ASD consultant who will support students with ASD integrated in regular classrooms and maintain the critical linkage with parents and community services.

Information about school board practices in Special Education can be found in the Special Education Plans developed by each school board. These are often posted on school board websites.

Expanded Community Services

The Ministry of Children and Youth Services funds a range of services and supports for children and youth with Autism Spectrum Disorders and their families including:

- The Autism Intervention Program which delivers Intensive Behavioural Intervention (IBI), child and family supports and transition services to children with autism
- Community services that help youth with ASD to make a successful transition to adolescence through additional behavioural supports, crisis intervention and skills-based training

- Family supports, through Autism Ontario's Realize Community Potential project, including parent support networks, training and resource materials and access to consultation with ASD specialists
- Online information and resources for families to assist them in finding and hiring Applied Behaviour Analysis (ABA) providers to work with their children with autism. The ABACUS website, www.abacuslist.ca, includes a registry of ABA providers as well as information for families who are seeking ABA services.

In addition, the ministry funds a number of ASD capacity building initiatives:

- The School Support Program – ASD to help teachers and educators better understand how children and youth with ASD learn, in partnership with the Ministry of Education
- A project with Geneva Centre for Autism to provide training for up to 1,600 resource teachers and home visitors who work in the child care sector
- An Ontario College Graduate Certificate Program in Autism and Behavioural Science that is available through six colleges or college consortiums in Ontario; in collaboration with the Ministry of Training, Colleges and Universities
- An Endowed Chair in Autism that was established at the University of Western Ontario in the Fall 2005 and graduate scholarships that are awarded annually by the Ontario Council of Graduate Studies.

The government also funds services and supports for families with children with special needs, including children and youth with ASD, such as: Children's Treatment Centres, speech and language services, infant development programs, residential and respite services, behaviour management programs, children's mental health services, developmental services and Assistance for Children with Severe Disabilities and the Special Services at Home program.

MAKING A DIFFERENCE
FROM EVIDENCE TO ACTION

The Ministers' Autism Spectrum Disorders Reference Group has defined a three-point agenda for action to guide the development of policies, programs and services for children with ASD. The following discussions, and accompanying recommendations, reflect effective, evidence-based educational practices that have proven effective in meeting the wide range of needs of students with Autism Spectrum Disorders.

1: Student Learning and Assessment

Educational practice must rely on evidence-based methodologies. Putting research into practice is the only way to ensure that educational outcomes are optimized for students with ASD.

When there is research evidence demonstrating that particular practices are effective, those practices should be implemented rather than practices for which there is less rigorous research evidence.

A comprehensive survey of practice, *Educating Children with Autism* (National Research Council, 2001), identified the following key program elements for students with ASD over age 5:

- Individualized programs conceptualized to meet the needs of the individual student
- Systematic and carefully planned, structured and constantly evaluated and modified based on data
- Structured environment – structure of the school environment and activities are organized, predictable and understandable for the student
- Specific Autism related goals – a functional curriculum that addresses the specific characteristics of Autism
- A proactive approach to behaviour that includes environmental adaptations and accommodations based on functional behaviour analysis (Koegel, Koegel, and Dunlap, 1996)
- Active family involvement (Lucyshyn, Dunlap, and Albin, 2002).

It has been found that these program elements are as important and, in some cases, may be more important to child outcomes than the use of any specific technique.

A full review of all specific ASD interventions is beyond the scope of this report. However, the best evidence was reviewed by the Reference Group. Based on this review, we have concluded that:

- Randomized controlled trials (RCTs) are the best way to determine the effectiveness of educational interventions.
- In the absence of RCTs, quasi-randomized design, controlled trials, and other methodologies, in that order, that support the causality of the effect of the intervention on outcomes can be examined.
- Other methodologies, both quantitative and qualitative, can be used to examine specific aspects of effective programs, and other outcomes such as satisfaction, barriers and opportunities.

At this time, the research indicates that Applied Behaviour Analysis (ABA) based practices (including intensive ABA) are the only practices that meet the criterion of effectiveness evidenced in randomized or non-randomized controlled trials.

In addition, there are other interventions for which either:

a) Some evidence exists (either in favour or against the intervention)
b) No evidence exists (either in favour or against the intervention)
c) Evidence exists (demonstrating either ineffectiveness or harm).

A more substantial body of evidence is required to identify all potential practices for students with ASD. It is important to note, however, that critically appraising the literature based on the strength of the evidence is a highly technical skill. The Reference Group reviewed a wide variety of sources for their approach to judging the strength of evidence, including:

- Canadian Task Force on Preventive Health Care (CMAJ, 2003)
- Exceptional Children (Exceptional Children, 2005)
- National Research Council (National Research Council, 2001)
- United States Preventive Services Task Force (United States Preventive Services Task Force)
- New York State Department of Health Early Intervention Program (New York State, 1999)
- American Psychological Association (American Psychological Association, Practice Guideline Development Process)
- United States Department of Education (U.S. Department of Education, What Works Clearinghouse)

As noted by Dr. Peter Szatmari in a recent briefing to the Standing Senate Committee on Social Affairs, Science and Technology, "It is true that early intervention makes a difference but it is not true that all children need exactly the same type of treatment. Not all children need incredibly intensive intervention that takes up between 20-40 hours a week. Some children do respond, but other children do not respond to even that level of intensity and can do just as well with less intensive forms of treatment that are carried out in more naturalistic settings. We do not know the relative proportion of those types of children but there is now more and more scientific evidence showing us that different forms of intervention can be adapted to different types of Autism Spectrum Disorder. More work needs to be done but we are much farther ahead today than we were five years ago" (Szatmari, 2006).

A range of services, placement options and programs is required to support the widely varied and complex needs of students with Autism Spectrum Disorders, including those with dual diagnosis and co-morbid conditions.

Placement should be flexible, based on the changing needs of the student, and evidence-based programming and services should be included in all placements. There are no clear indicators as to one ideal setting. Rather, the needs of the individual must be taken into account when deciding on placement.

Any placements that are considered for students with ASD need to take into account the necessary program components, and ensure that they can be incorporated into the selected placement at a given time, and in a way that is sufficient to meet students' needs.

The educational process that determines placement for an exceptional student is the Identification, Placement and Review Committee (IPRC) process. Students with exceptionalities require an Individual Education Plan (IEP) which includes the following critical components of effective evidence-based programming:

- The student's program is comprised of individual, child-specific learning goals that have been derived from the Ontario Curriculum with appropriate accommodations and modifications, according to the student's individual needs. The student may have Alternative Learning Expectations based on the student's profile of needs which may include life, community, social, communication and behaviour skills.
- The program is based on and modified by the results of ongoing assessment and evaluation that includes a plan containing specific objectives and an outline of education services that meet the needs of the student with ASD.
- Student progress is based on ongoing data collection and assessment that is measured against identified objectives, and clearly communicated in the reporting process.

Services are available for children and youth through the school and community-based agencies. All school-aged children, including those with ASD, have the same right to attend school. Therefore, the school and community-based agencies need to work collaboratively to coordinate services.

☞ A student's program must be developed by a multi-disciplinary, collaborative team.

School boards should ensure that multi-disciplinary teams are involved in service planning.

These teams should include the parents, teacher and school administrator and, based on the student's needs, may include a psychologist with supervisory capability in the principles of ABA, an educational consultant, psychologist, behavioural consultant, speech-language pathologist, occupational therapist, physiotherapist, and when appropriate, a representative of the student's IBI team. Local differences and opportunities should be taken into account to address the unique needs of communities.

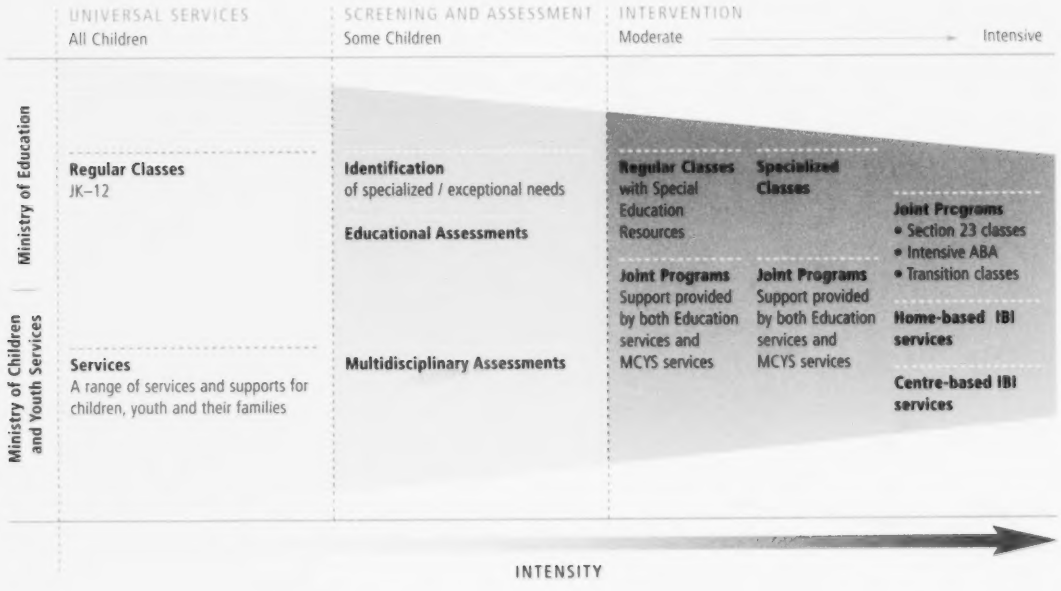
When a student is participating in an intensive ABA program, co-ordination of programming among school and other community settings must be ensured.

☞ A range of services is required to respond to the complex needs of children and families living with ASD.

The use of these services, however, is not necessarily a linear progression across intensity and time. Rather, an effective service delivery system must support access to multiple services at any given time. This might entail, for example, the delivery of highly therapeutic services while a student is involved in a universal service such as schooling.

To effectively provide services, individual service providers must have an understanding of how the broad spectrum of services fit together and interact. Each provider should have a clear understanding of the role and responsibilities it has in the multi-disciplinary service plan for a child and family. Each service should also be provided in a manner and place that supports the most typical life-stage experience for the child and family.

The following diagram depicts, at the highest level, such a system-wide view of integrated service delivery, illustrating both the continuum of services provided across the ministries of Education and Children and Youth Services, and across the dimension of intensity of service, from universal services (for all students) to intensive interventions (for some students).



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Similarly, this diagram may be articulated at a variety of levels of detail, while maintaining the integrity of the larger structure. Such a diagram might be used at the community level, to identify local programs, services and resources within this conceptual framework. More importantly, it would aid in identifying – at any level of detail – service gaps which may exist, relationships between services, and the availability of expertise, while at the same time clearly articulating the roles and responsibilities of each partner in the process.

Transition planning is an important process for all children, but especially for children with ASD, due to the complex nature of their learning needs. Planning and preparation for transitions ensures that children with ASD continue to make progress, receive the services and programs they need, and that changes occurs in a smooth, transparent fashion.

The following were identified as critical transition points for planning purposes:

- Entry to school
- Transition between activities, classrooms and settings
- Transitions between grades
- Moving from school to school or from outside agency to school
- Transition from elementary to secondary school
- Secondary school to adult life (post-secondary/community).

Planning and preparation carried out by a team of key people has been identified as essential to effective transition planning.

Effective transitions will support the following outcomes:

- Smooth transitions for children/youth
- Reduction in student and parent anxiety around change
- Continued progress and achievement for children and youth

- Effective collaboration between professionals and agencies
- Increased numbers of children transitioning from the Autism Intervention Program into schools
- Successful employment and community participation for individuals with ASD.

There are several government resources that contain further information on this topic, and are useful in planning for transition for students with ASD:

- *Entry to School: A Resource Guide* (Ministry of Education, 2005)
- *Transition Planning: A Resource Guide* (Ministry of Education, 2002)
- *Special Education Transformation* (Ministry of Education, 2006)
- *Autism Intervention Program Guidelines* (Ministry of Children and Youth Services, revised 2006)

A number of additional resources outline effective practices to guide transition planning for children with ASD, but further research is needed in this area to delineate key features at each transition stage.

☞ Regular, accurate and comprehensive assessments of students with ASD form the foundation for effective programs, services and professional development.

Assessments also provide critical information for the evaluation of programs and services.

It is important that the primary purposes of assessment be recognized and understood. As outlined in *Education for All* (Ministry of Education, 2005), these include:

- Specifying and verifying problems (strengths and needs)
- Making accurate decisions about students' programs
- Making a range of decisions, such as referral decisions, screening decisions, classification decisions, instructional planning decisions, or progress decisions
- Determining requisite instruction
- Determining particular interventions that may be necessary for the students to gain access to opportunities for achieving desired outcomes.

Successful practices and principles of assessment are outlined in resources such as *Educating Students with Autism* (National Research Council, 2001), from which the following are adapted:

- Multiple areas of functioning must be assessed, including intellectual, communication, behavioural, functional, and academic.
- A developmental perspective is critical.
- A profile of strengths and weaknesses vs. global scores and generalizations from 'splinter' skills is important; there is no 'typical' profile for ASD students.
- Facilitating and detrimental conditions must be studied to understand the variability of behaviour.
- Functional adjustment and adaptive behaviour are particularly important.
- It is critical that the effect of a child's social disability on behaviour be considered.
- Behavioural difficulties must be taken into account.

In reviewing the Ontario context, the Reference Group identified the following, which must be considered:

- In some areas of the province there is a lack of professional personnel such as psychologists, speech-language pathologists and other professionals with specific expertise in ASD.
- Assessment professionals in school boards need direct professional development in specific ASD assessment practices.
- There is a need within school boards for 'successful practice' screening, identification and assessment instruments specific for use with students who have ASD.
- There is a need for timely and ongoing access to assessments by multidisciplinary assessment teams. This may require the creation of linkages which would integrate existing agencies and other resources.

☞ It is important to separate the concepts of curriculum and instructional approach.

School personnel and support/resource staff must have an understanding of how ASD affects learning. They must be able to deliver programs utilizing evidence-based instructional strategies for students with ASD which would include, as required:

- Intensive teaching based on the principles of ABA
- Communication programming that supports the development of spoken language, and may employ visual supports, augmentative communication systems and assistive technology to enable or enhance the development of communication skills
- Strategies to develop and enhance social understanding and skills with structured opportunities for practice in the environment in which the skills are required
- A functional behaviour assessment and analysis
- Modification of curriculum content based on a comprehensive understanding of the student's individual learning profile, and may include alternative approaches to learning.

THE MINISTERS' ASD REFERENCE GROUP RECOMMENDS TO THE MINISTERS OF EDUCATION AND CHILDREN AND YOUTH SERVICES THAT:

1. Evidence-based educational programs and services are implemented in keeping with the best available evidence.

2. A memorandum is distributed to provide direction on the implementation of ABA in schools.

3. A range of placement options, which include the use of ABA-based practices if appropriate, is available in school boards for students with ASD.

   A range of placement options may include, but is not limited to:

- Regular classes with integrated supports, opportunities for withdrawal for direct instruction
- Specialized classes for students with ASD
- Care and treatment (Section 23) classes, which may include intensive ABA;
- Transition programs
- Special day schools or demonstration schools
- Centres of Excellence and inter-ministerial models that provide continuity of service.

4. Centres of Excellence are created in school boards.

   These Centres would be located in designated schools. Additional considerations will be necessary for rural, remote and francophone schools. The functions of the Centres would include:

- Concentration of expertise and resources
- Provision of educational leadership and an inclusive environment for students that maximizes their potential for learning
- Facilitation of research and development of evidence-based practices.

5. Access to a standard range of services is available in every school board, including access to a standard level of service within each school.

6. A reduced student/teacher ratio is considered when a student with ASD is in a regular class.

7. Multi-disciplinary teams include all necessary disciplines and have the capacity to develop and implement evidence-based processes, programs and protocols involved in program planning.

8. Key transitions for students with ASD are supported.

   This would include the provision of:

- Resources such as funding and personnel with expertise to facilitate transitions
- Protocols that reflect consistent expectations between organizations across the province
- Processes that involve a multi-disciplinary team for planning, support and information sharing.

9. Timely, multi-disciplinary and informed assessments are available for all students with ASD.

   This includes funding and supporting the resources, training, models and linkages required for multi-disciplinary assessment processes within school boards.

10. Every school board has access to a standard range of equipment and materials for students with ASD, as well as training on their use.

    This would include:

- Curriculum materials for specific areas of need for students with ASD that are not addressed in the Ontario curriculum, such as self-management, sexuality, social, communication and life skills
- Augmentative communication and assistive technology resources.

11. Teachers have access to alternate assessment materials to allow students with ASD to participate in provincial curriculum assessments.

12. Individual Education Plans are regularly monitored and evaluated and include Behavioural Intervention Plans, Safety Plans, and Transportation Plans when appropriate.

13. Collaborations between the ministries, school boards and community partners continue to enhance programs and opportunities for students with ASD in secondary schools.

    This includes academic and alternative programs, placement options, work experience and transitions to post-secondary environments.

14. A clear action plan is defined to address peer awareness and bullying for students with ASD.

Rui

Rui is a 9 year old who has recently been diagnosed with Asperger Syndrome. Rui's family has recently moved to Canada, and he is learning to speak English. Rui appears very capable, but he regularly questions authority and is perceived as having difficulty following the rules. He is experiencing daily meltdowns resulting in his being sent home. Rui is very verbal and explains that he is being persecuted at school. Rui has run away from school several times.

Julia

Julia is a 12 year old student with PDD-NOS. Julia has been integrated in a regular class with support since kindergarten. Julia has been one of the school's great 'success stories', has made friends, and is working for the most part at her peer's academic level. However, Julia has begun to show signs of anxiety and difficult behaviours. Her teacher is noticing that Julia seems to require more curriculum modifications than in previous years. Her parents are worried that she is regressing in the program, and she has begun to exhibit new behaviours at home.

2: Research and Knowledge Mobilization

☞ Effective programs for students with ASD are complex and multidimensional, and require the development and maintenance of specific expertise.

Greater access to expertise and ongoing training, and increased levels of training, are needed. This may require new resources or inter-ministerial collaboration to maximize specialized services across sectors/systems. Such an approach would entail:

- Training across the areas of curriculum, educational practices and measurement of outcomes
- Expansion of the number of Additional Qualifications courses related to ASD
- Review of the education policy and funding model
- Cross-ministerial collaboration to ensure that training efforts are complementary

National Research Council

Six scientific principles that apply in the field of educational research:

1. Posing significant questions that can be answered empirically
2. Linking research to relevant theory
3. Using methods that permit direct investigation of the question
4. Providing a coherent and explicit chain of reasoning
5. Replicating and generalizing across studies
6. Disclosing research to professional scrutiny and critique.

(Shavelson & Towne, 2002)

- Enhanced resource materials such as standardized equipment and resources appropriate for students with ASD.

It is not just knowledge of effective practices that is critical, but the way in which this knowledge is transferred, and the culture of openness and receptivity to change at all levels, that will determine the success of implementation on a large scale.

Accountability means measuring the effectiveness of educational interventions with respect to student learning outcomes and educational process outcomes.

Outcomes to be measured will be designed and implemented to ensure that individual children are making expected gains, and that province-wide evidence-based educational interventions are being implemented as designed and planned.

This includes fidelity to programs, techniques, and educational plans as designed and measured in the published research (process outcomes), as well as improvements in academic, social and/or behavioural goals for the students (student outcomes).

Accountability for student outcomes should occur at the levels of the individual student, school, school board and ministry overall.

Expected gains for students will be individualized to the student. Using evidence-based interventions, students' educational progress will be maximized and students with ASD will achieve their potential.

For systems, process outcomes will depend on the intervention implemented, but may include:

- Hours of service
- Type of service
- Percentage of children receiving service (by board or region)
- Time taken to access service after IPRC or IEP.

THE MINISTERS' ASD REFERENCE GROUP RECOMMENDS TO THE MINISTERS OF EDUCATION AND CHILDREN AND YOUTH SERVICES THAT:

15. School boards are provided with a resource guide on effective educational practices for students with ASD.

16. School staff and administrators receive training on how to deliver effective educational practices for students with ASD.

    This would include training on how to:

- Apply the principles of ABA
- Create meaningful, relevant and measurable IEPs
- Modify curriculum and provide environmental accommodations based on the learning profile and specific needs of the student
- Assess and report student progress based on ongoing data collection of identified objectives.

17. Collaborations continue between the Ministry of Education, school boards and training institutions to provide ongoing direction and professional development for school board staff on effective screening and assessment procedures for students with ASD.

    This would include courses and workshops for psychologists, speech-language pathologists, teachers and other educators on the use of assessments that are appropriate for students with ASD.

18. Controlled research on practices that are considered useful in pilot or uncontrolled trials is facilitated and supported.

    Demonstration or pilot projects initiated by the ministries should include:

- A research component that uses appropriate research frameworks to determine the feasibility and effectiveness of that project
- Trained educational researchers
- Funding support for educational interventions.

19. Research data is made available through a registry of evidence-based research and practices on a public website of the Ontario government.

    The registry should include:

- Associated levels of evidence and strength of recommendations
- A database of reviews assessing the evidence for interventions based on the primary research.

20. An ongoing multidisciplinary Research Reference Advisory Group is established to review literature and research to inform the implementation, outcome and continuous improvement of evidence-based practices and programs.

21. A Knowledge Mobilization Office is created to ensure that policies and procedures are translated into practice in school boards.

    The Knowledge Mobilization Office would:

- Develop comprehensive strategies to transfer both experiential and documented knowledge in an effective and efficient manner
- Use evidence-based methods to collect and disseminate knowledge.

22. The number of students with ASD in Ontario schools is identified and reported to the Ministry of Education.

    This data is necessary to inform community planning, and assign appropriate resources for students, educators and parents.

23. Additional Qualification courses related to ASD are provided and funding is made available for teachers to complete Additional Qualification courses in Special Education.

3: Partnerships and Shared Responsibility

☞ A collaborative working relationship among parents, school and community is vitally important in supporting positive learning outcomes for students with ASD.

In a recent study, it was noted that "it is not *where* the children received their education that was so much an issue as *what* happened within the placement." In this study, parent perceptions of how schools are doing indicated that less than half of the surveyed parents of students with an ASD were satisfied with their child's education and placement. (Starr, Foy, Cramer and Singh, 2006)

The Reference Group notes that while the facts presented in *Special Education Transformation* (Ministry of Education, 2006) are accurate, they do not entirely reflect the reality of some parents of children with ASD, who may experience a variety of barriers which limit access to educational opportunities in some schools.

These limits place a large burden on the shoulders of parents. Parents may be forced to reduce or eliminate regular employment in order to handle these needs, limiting family income, reducing the opportunity for funding other interventions for their special needs children, and adversely affecting the entire family.

Students with ASD often have other conditions that make quality of life and adaptation much more difficult than that of the regular population. In particular, some students with ASD develop or have co-morbid disorders such as attention deficit disorder, mood disorder or an anxiety disorder.

The parent/school relationship needs to be addressed. Many parents have found that the ability to collaborate varies widely from school to school and class to class, and sometimes depends on the individual educator's views and approach to special education.

The Reference Group strongly supports any efforts to increase collaboration between parents and the school system, which would in turn reduce parental stress and improve learning outcomes for students.

☞ Integration of services is critical for students with ASD.

Due to their widely varied needs, students with ASD require a broad range of services.

Students with ASD require access to speech-language pathology services. Some students also require support, through occupational and physical therapy, to develop fine and gross motor skills. In some cases, a consultative model is not appropriate – some students need direct access to these services.

It is critical that school boards and schools work collaboratively with service providers from outside the school system.

The involvement of community partners within the schools is a critical process. Positive outcomes for students with ASD rely on a multi-disciplinary approach that includes all partners.

☞ Building educational capacity necessitates the review and/or cessation of policies and practices which present barriers, and the development of policies and practices which lead to desired outcomes for students with ASD.

Sometimes new or improved funding is necessary to build capacity, but strategic choices or changes in direction, or concentration of existing resources, may also be very effective in achieving improved educational environments for students and staff.

For students with ASD, the level of need does not always correspond to level of functioning – an apparently higher functioning teenager may still have high needs. Funding to support students with ASD should not be tied to students' intellectual scores.

As noted in *Special Education Transformation* (Ministry of Education, 2006), the funding model that is put in place must ensure stability and predictability for boards so that they may plan program and service delivery for their students.

Peter

Peter is a 14 year old high needs student with autism, undergoing assessment for a dual mental health diagnosis. Peter lives in a residential program for high needs children. At all times, he requires adults who are trained in crisis prevention. Peter often becomes aggressive towards other students and staff. Peter cannot be placed with non-verbal or vulnerable students as he will hit them if he has the opportunity.

THE MINISTERS' ASD REFERENCE GROUP RECOMMENDS TO THE MINISTERS OF EDUCATION AND CHILDREN AND YOUTH SERVICES THAT:

24. The recommendations of the Special Education Transformation report with respect to Parent Collaboration and Service Integration are implemented.

25. Processes are enhanced to ensure that parents are active participants and partners in the ongoing development of their child's educational outcomes.

    This would include:

- Regular communication between educators and parents
- Sharing in the development and regular, ongoing review of the IEP
- Moving from 'consulting' to 'meaningful partnership' with parents in providing consistent approaches that support student learning and achievement
- Encouraging parental participation in school and learning environments
- Ensuring that protocols and an appropriate accountability system are in place to monitor parental engagement.

26. Service delivery for students with ASD is enhanced.

    This would include:

- Developing or expanding existing local processes which involve local school boards, community agencies and families in program development and planning
- Increasing and improving the capacity of the broader system to respond to needs of children and youth with ASD
- Supporting partnerships and integration in service delivery
- Expanding the role of the ASD consultants through the School Support Program to include recommendations based upon a comprehensive assessment of the student and the learning context.

27. All partners such as teachers, parents, educational assistants and service providers are included in training opportunities to enhance the achievement of student goals and outcomes.

    The current initiatives provided through the School Support Program and Geneva Centre for Autism should be evaluated for effectiveness and possibly expanded to include all partners.

28. Education policy and the funding model are reviewed to enhance system capacity for students with ASD.

    This would include:

- Reviewing the 'Section 23' funding mechanism for providing service to children in care and treatment to ensure that it supports flexibility and shared responsibility for students

- Reviewing Ministry of Education Policy Program Memorandum 81 (PPM 81) to ensure that it addresses the needs of the student population regarding the shared responsibilities of the involved ministries for delivery of health-related service to students
- Improving the funding formula to ensure that adequate resources can be procured, including support staff, materials and home instruction, if required.

29. Cross-ministerial and community collaborations continue to be enhanced.

    Current initiatives should be reviewed including the Assistant Deputy Minister's Task Force, school board initiatives, the Provincial Advisory Group, the School Support Program, Implementation Working Group and programs provided by Geneva Centre for Autism to examine effective models for enhancing effectiveness and collaboration.

30. Meaningful opportunities for learning, inclusion and socialization of students with ASD both within and external to the school environment are further developed through the collaborative work of school boards, schools and community partners.

31. A multi-disciplinary, flexible response capacity is available to support students, families and schools in crisis situations.

    The response should enable access to:

- A case resolution process
- Specialized services such as psychology, specialized placements, home-based support, school-based support and respite
- Emergency funding.

32. Public awareness programs about the nature of ASD and the impact on students with this diagnosis and their families are promoted and supported within schools.

33. Pre-service, in-service, and professional development programs provide information on effective IPRC practices and IEP development and implementation, including collaborative communication with parents.

34. An advisory group is established to meet quarterly to provide advice on the implementation of the recommendations of the Ministers' ASD Reference Group.

Jamal

Jamal is a Grade 11 student with Asperger Syndrome and has also been identified as gifted. Jamal has aspirations of going into medicine to become a doctor, and has no alternate plan. He has always been in integrated settings without support, and has done very well. However, in Grade 11, his achievement is slipping. He is struggling academically and socially, and is still passing, but is clearly not working to his potential. He is beginning to experience significant self-esteem issues. Homework is also causing significant issues at home. Socially, he has made some friends for the first time in his life, and he wants to stay at his home school. Jamal does not identify himself as a 'special needs' student and does not want to attend a special education class. He will accept support but it needs to be provided discreetly.

MOVING FORWARD
PRIORITIES FOR ACTION

Successful implementation requires that the dynamics of the change process – and the role of organizational culture – be both understood and utilized at every level of the system.

FACILITATING CHANGE

Ontario's education system has been engaged in a process of large-scale reform since 2003. The province's change leaders realized early on that sustainable improvement requires commitment and participation by all education partners – teachers, administrators, school boards, parents, and the broader community.

The 'Tri-Level' approach widely articulated by Dr. Michael Fullan, in which governments, school districts and schools work together on common approaches and strategies, has been adopted as a core foundation of large-scale change in Ontario. Likewise, an explicit part of Ontario's strategy involves the building of strong relationships and close connections with – and among – boards, schools and other organizations.

In supporting such a model of change, and the critical steps identified by Dr. Fullan as necessary to the change process, the Reference Group recommends that an implementation advisory committee be established to meet quarterly to develop and monitor planning and implementation of the recommendations contained in this document.

Such a group would ensure that:

- All partners are genuinely engaged, and that strong links are maintained between this initiative and those at the provincial, regional and local levels
- The change process is supported by a broad range of learning programs including techniques such as coaching, mentoring, and the development of learning communities which lead to a culture of learning, evaluation and change
- There is an understanding of, and facility with, the change process at all levels of leadership within the system
- There is coherence across initiatives, systems, and implementation processes.

Key Drivers for Change
1. Engaging peoples' moral purpose
2. Capacity-building
3. Understanding the change process
4. Developing cultures for learning
5. Developing cultures of evaluation
6. Focusing on leadership for change
7. Fostering coherence-making
8. Cultivating tri-level development
(Adapted from the work of Dr. Michael Fullan)

The Reference Group acknowledges that large-scale change is a multi-faceted process encompassing not only the development of policies, programs and resources, but equally the evolution of coordinated and integrated delivery mechanisms, and a system-wide culture which supports and facilitates effective implementation at the local, regional and provincial levels.

PRIORITIES FOR ACTION

Accordingly, the Reference Group proposes the following implementation timelines for the recommendations contained in this report. The Minister's ASD Reference Group recommends to the Ministers of Education and Children and Youth Services that:

Immediate (June 2007)

- A memorandum is distributed to provide direction on the implementation of ABA in schools.
- The recommendations of the Special Education Transformation report with respect to Parent Collaboration and Service Integration are implemented.
- Processes are enhanced to ensure parents are active participants and partners in the on-going development of their child's educational outcomes.
- All partners such as teachers, parents, educational assistants and service providers are included in training opportunities to enhance the achievement of student goals and outcomes.
- Cross-ministerial and community collaborations continue to be enhanced.
- Public awareness programs about the nature of ASD and the impact on students with this diagnosis and their families are promoted and supported within schools.
- An advisory group is established to meet quarterly to provide advice on the implementation of the recommendations of the Ministers' ASD Reference Group.

Short-Term (2007/2008)

- Evidence-based educational programs and services are implemented in keeping with the best available evidence.
- A range of placement options, which include the use of ABA based practices if appropriate, is available in school boards for students with ASD.
- Centres of Excellence are created in school boards.
- Access to a standard range of services is available in every school board, including access to a standard level of service within each school.
- A reduced student/teacher ratio is considered when a student with ASD is in a regular class.
- Multi-disciplinary teams include all necessary disciplines and have the capacity to develop and implement evidence-based processes, programs and protocols involved in program planning.
- Key transitions for students with ASD are supported.
- Timely, multi-disciplinary and informed assessments are available for all students with ASD.
- Every school board has access to a standard range of equipment and materials for students with ASD, as well as training on their use.
- Teachers have access to alternate assessment materials to allow students with ASD to participate in provincial curriculum assessments.
- Individual Education Plans are regularly monitored and evaluated and include Behavioural Intervention Plans, Safety Plans, and Transportation Plans when appropriate.
- Collaborations between the ministries, school boards and community partners continue to enhance programs and opportunities for students with ASD in secondary schools.
- A clear action plan is defined to address peer awareness and bullying for students with ASD.
- School boards are provided with a resource guide on effective educational practices for students with ASD.
- School staff and administrators receive training on how to deliver effective educational practices for students with ASD.

- Collaborations continue between the Ministry of Education, school boards and training institutions to provide ongoing direction and professional development for school board staff on effective screening and assessment procedures for students with ASD.
- Research data is made available through a registry of evidence-based research and practices on a public website of the Ontario government.
- An ongoing multidisciplinary Research Reference Advisory Group is established to review literature and research to inform the implementation, outcome and continuous improvement of evidence-based practices and programmes.
- A Knowledge Mobilization Office is created to ensure that policies and procedures are translated into practice in school boards.
- The number of students with ASD in Ontario schools is identified and reported to the Ministry of Education.
- Additional Qualification courses related to ASD are provided and funding is made available for teachers to complete Additional Qualification courses in Special Education.
- Service delivery for students with ASD is enhanced.
- Education policy and the funding model are reviewed to enhance system capacity for students with ASD.
- Meaningful opportunities for learning, inclusion and socialization of students with ASD both within and external to the school environment are further developed through the collaborative work of school boards, schools and community partners.
- A multi-disciplinary, flexible response capacity is available to support students, families and schools in crisis situations.
- Pre-service, in-service, and professional development programs provide information on effective IPRC practices and IEP development and implementation, including collaborative communication with parents.

Long-Term

- Controlled research on practices that are considered useful in pilot or uncontrolled trials is facilitated and supported.

Where there is an open mind,
there will always be a frontier.

Author unknown

WHAT WILL BE DIFFERENT?

The Reference Group has carried out its work with the intent to advise the Minister of Education and the Minister of Children and Youth Services on the most effective ways to meet the needs of students with Autism Spectrum Disorders in Ontario schools.

We envision an education system in which effective learning and assessment result in improved student outcomes, and reduce the anxiety experienced by students with ASD and their families.

We envision an education system in which expanded research capacity and improved knowledge mobilization enhance system-wide accountability, and ensure that programs and practices are child and youth-centred, respectful, responsive, accessible and accountable.

We envision an education system which enables success for students with ASD. In this system, services are effectively integrated, and families, schools and community partners are genuinely and collaboratively engaged in a shared commitment to ensuring that students with ASD can reach their highest potential in school, and in later life.

We respectfully submit our recommendations with confidence that they reflect effective, evidence-based practices that will significantly enhance programs and services for students with ASD, while supporting the visions of the Ministry of Education and Ministry of Children and Youth Services and assisting government in fulfilling its commitment to providing a high quality education for every Ontario student.

Darnell

Darnell is a 19 year old student with PDD-NOS. Darnell has been successful with significant support in high school, both socially and academically. He is interested in pursuing a career in pharmacy, and would like to attend university. Darnell's family is worried about his transition, and what supports will be available to him in class and in residence.

RECOMMENDATIONS

RECOMMENDATIONS

THE MINISTERS' ASD REFERENCE GROUP RECOMMENDS TO
THE MINISTERS OF EDUCATION AND CHILDREN AND YOUTH SERVICES THAT:

1. STUDENT LEARNING AND ASSESSMENT

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   A range of placement options may include, but is not limited to:

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- Care and treatment (Section 23) classes, which may include intensive ABA;
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   These Centres would be located in designated schools. Additional considerations will be necessary for rural, remote and francophone schools. The functions of the Centres would include:

- Concentration of expertise and resources
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8. Key transitions for students with ASD are supported.

   This would include the provision of:

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- Protocols that reflect consistent expectations between organizations across the province
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   This includes funding and supporting the resources, training, models and linkages required for multi-disciplinary assessment processes within school boards.

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    This would include:

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2. RESEARCH AND KNOWLEDGE MOBILIZATION

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16. School staff and administrators receive training on how to deliver effective educational practices for students with ASD.

    This would include training on how to:

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- Increasing and improving the capacity of the broader system to respond to needs of children and youth with ASD
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- Expanding the role of the ASD consultants through the School Support Program to include recommendations based upon a comprehensive assessment of the student and the learning context.

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The current initiatives provided through the School Support Program and Geneva Centre for Autism should be evaluated for effectiveness and possibly expanded to include all partners.

28. Education policy and the funding model are reviewed to enhance system capacity for students with ASD.

    This would include:

- Reviewing the 'Section 23' funding mechanism for providing service to children in care and treatment to ensure that it supports flexibility and shared responsibility for students
- Reviewing Ministry of Education Policy Program Memorandum 81 (PPM 81) to ensure that it addresses the needs of the student population regarding the shared responsibilities of the involved ministries for delivery of health-related service to students
- Improving the funding formula to ensure that adequate resources can be procured, including support staff, materials and home instruction, if required.

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    Current initiatives should be reviewed including the Assistant Deputy Minister's Task Force, school board initiatives, the Provincial Advisory Group, the School Support Program, Implementation Working Group and programs provided by Geneva Centre for Autism to examine effective models for enhancing effectiveness and collaboration.

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    The response should enable access to:

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- Specialized services such as psychology, specialized placements, home-based support, school-based support and respite

- Emergency funding.

32. Public awareness programs about the nature of ASD and the impact on students with this diagnosis and their families are promoted and supported within schools.

33. Pre-service, in-service, and professional development programs provide information on effective IPRC practices and IEP development and implementation, including collaborative communication with parents.

34. An advisory group is established to meet quarterly to provide advice on the implementation of the recommendations of the Ministers' ASD Reference Group.

APPENDICES

APPENDIX A
MINISTERS' AUTISM SPECTRUM DISORDERS REFERENCE GROUP

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APPENDIX B
GLOSSARY OF TERMS

ACCOUNTABILITY

The obligation to answer for results and the manner in which responsibilities are discharged. Accountability cannot be delegated. Effective accountability is the product of three key elements:

- Expectations defined and consistent action managed,
- Performance reported on and monitored
- Actions based on results.

APPLIED BEHAVIOUR ANALYSIS (ABA)

Applied Behaviour Analysis employs methods based on scientific principles of learning and behaviour to build useful repertoires and reduce problematic ones (Cooper, Heron, and Heward, 1989). Using this approach, there is a clear definition of the behaviour(s) to be changed, careful recording of the behaviour, and analysis of the antecedents and reinforcers that can be used to help develop new adaptive behaviours and reduce undesireable behaviours.

Interventions based on behavioural principles are data-driven and designed to change the behaviour, and the program is monitored closely. Progress is assessed, empirically, and the program is modified as necessary. ABA can be applied to anyone including people of every age, it can be applied in a variety of situations, and it can be employed for very limited and specific purposes such as for the development or reduction of single behaviours or classes of behaviour (for example, to improve relaxation skills, to reduce smoking behaviour, or to teach more effective social skills). Certainly, ABA can be applied to individuals with ASD and it can be applied in a comprehensive and intensive manner, such as is the case with Intensive Behavioural Intervention.

AUTISM SPECTRUM DISORDERS (ASD)

Autism Spectrum Disorders (ASD) is a term that was coined by both Wing and Allen to describe a subset of the Pervasive Developmental Disorders (PDDs) currently outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). These disorders share three common areas of concern:

- Qualitative impairments in social skills
- Qualitative impairments in verbal and nonverbal communication
- Restricted and repetitive interests or behaviours.

When using the term ASD, most professionals are referring to the subset of PDDs that includes Autistic Disorder (usually referred to as Autism), PDD-NOS (not otherwise specified), and Asperger's Disorder.

The term 'spectrum' is also used to refer to a continuum of developmental severity. Autistic Disorder, considered to be at the more severe end of the spectrum, is accompanied by significant cognitive impairments in about 75%-80% of cases. On the other hand, most individuals with Asperger's Disorder tend to have average to above average intellectual functioning (Perry & Condillac, 2003).

AUTISTIC DISORDER (AD)

- Most common: ~21.6 in 10,000
- Deficits in verbal and non-verbal communication
- Deficits in social understanding
- Unusual behaviours, restricted activities

PERVASIVE DEVELOPMENTAL DISORDER NOT OTHERWISE SPECIFIED (PDD-NOS)

- Common: ~32.8 in 10,000
- Also called atypical Autism
- Severe and pervasive impairment in some areas such as reciprocal social interaction, or restricted activities and interests but the strict criteria for autistic disorder are not met

ASPERGER DISORDER (ALSO CALLED ASPERGER'S SYNDROME, ASPERGER SYNDROME, AND AS)

- Common: ~10.1 in 10,000
- Mild to severe impairments in social interaction and understanding
- Restricted and repetitive activities and interests
- Language and cognitive development not delayed
- Deficits in communication

CAPACITY BUILDING

Increasing the knowledge, expertise and ability for a community, organisation or individual to contribute to addressing the needs of children and families.

COLLABORATIVE

Planning, implementing, shared decision-making and working together to provide services.

COMMUNITY-BASED

Provided within, and consistent with, the family's community.

CO-MORBID

Two or more disorders being experienced by one individual.

EDUCATIONAL PRACTICES

Practices that enhance student potential and reduce gaps in student achievement.

EVIDENCE-BASED

Based on research and data driven, with measurable outcomes; needs are revealed through data and action plans are delivered from the data; data is used to establish a baseline upon which impact can be measured.

INSTRUCTIONAL STRATEGIES

A range of approaches educators use to engage students in the learning process and enable them to achieve their learning potential.

INTEGRATED SERVICES

Services provided through a comprehensive plan which reflects influence from all expertise and perspectives involved in the development and implementation of the plan.

INTENSIVE BEHAVIOURAL INTERVENTION (IBI)

Intensive Behavioural Intervention is an intensive and comprehensive form of intervention that was designed for young children with autistic spectrum disorders. It is based on the principles and techniques of Applied Behaviour Analysis (ABA).

This intervention may be thought of as an intensive form of teaching children that typically involves between 20 to 40 hours of intervention per week, and that addresses skills deficits, (across a curriculum of developmental skills) together with approaches to improve behaviour.

IBI makes use of a wide variety of specific techniques including a one-to-one discrete trial approach with opportunities for very frequent learning trials, as well as more naturalistic approaches which may take place in home-based programs, specialized small group settings, or integrated settings. As is the case with any form of ABA, antecedents and reinforcers are analyzed, the program is carefully monitored, progress is assessed, empirically, and the program modified if necessary (adapted from Perry & Condillac, 2003).

KNOWLEDGE MANAGEMENT

The systematic process of collecting, developing, accessing and sharing both explicit and implicit intellectual capital to sustain and enhance organizational performance.

KNOWLEDGE MOBILIZATION

"Getting the right information to the right people in the right format at the right time, so as to influence decision-making. Knowledge Mobilization includes dissemination, knowledge transfer and knowledge translation." (Ontario Neurotrauma Foundation: website)

PPM 81

Policy/Program Memorandum No.81, *Provision of Health Support Services in School Settings* was issued in 1984 to ensure the provision of health support services to school-age children as a shared responsibility between the Ministries of Education, Health, and Community and Social Services.

PROGRAMS AND SERVICES

Within The Education Act:

Special education program means, in respect of an exceptional pupil, an educational program that is based on and modified by the results of continuous assessment and evaluation and that includes a plan containing specific objectives and an outline of educational services that meets the needs of the exceptional pupil.

Special education services means facilities and resources, including support personnel and equipment, necessary for developing and implementing a special education program.

SECTION 23 PROGRAMS

Programs that are provided in government-approved care, treatment, custody or correctional facilities for pupils who cannot attend local schools because of their need for care and/or treatment. Section 23 is the number of the relevant section in the regulatory document *Grants for Student Needs*. As the grant regulation is revised, this number is subject to change.

SELF-DETERMINATION

"Self-determination is a combination of skills, knowledge, and beliefs that enable a person to engage in goal-directed, self-regulated, autonomous behaviour. An understanding of one's strengths and limitations together with a belief in oneself as capable and effective are essential to self-determination. When acting on the basis of these skills and attitudes, individuals have greater ability to take control of their lives and assume the role of successful adults in our society" (Field, Martin, Miller, Ward, and Wehmeyer, 1998).

SERVICE COORDINATION

The process of ensuring that school boards and community-service agencies define respective roles and responsibilities in the provision of non-educational services for students with special needs.

SUSTAINABLE

Progresses over a continuum and builds capacity for commitment.

TRANSITION PLANNING

A coordinated set of activities that prepare students for change. Transition planning for students with ASD include: preschool to school, grade to grade, community agency to school, elementary to secondary school, and school to post-secondary/community.

APPENDIX C
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ISBN 978-1-4249-3407-2 (Print) ISBN 978-1-4249-3408-9 (TXT) ISBN 978-1-4249-3409-6 (PDF)

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